8800 ERRATA SHEET

August 8, 1975

DISPLAY/CONTROL BOARD CAPACITOR MODIFICATIONS

NOTE: THE FOLLOWING CAPACITOR VALUE SUBSTITUTIONS ARE CRITICAL IN THE OPERATION OF AN ALTAIR SYSTEM USING 4K DYNAMIC MEMORY BOARDS. THE NECESSARY CAPACITORS WILL BE INCLUDED WITH EACH ALTAIR KIT AND WITH EACH 4K MEMORY BOARD KIT, BUT THE SUBSTITUTIONS NEED BE PERFORMED ONLY ONCE. PERFORM THE SUBSTITUTIONS WHETHER YOU HAVE 4K BOARDS OR NOT.

THE FOLLOWING CAPACITORS ON THE DISPLAY/CONTROL BOARD ARE TO BE CHANGED TO THE VALUES INDICATED BELOW:

C7 should now be 0.01µf

C8 should now be 0.1µf

THESE SUBSTITUTIONS ARE TO IMPROVE THE OPERATION OF THE ALTAIR'S DEPOSIT CIRCUITRY.

8800 GROUNDING MODIFICATION

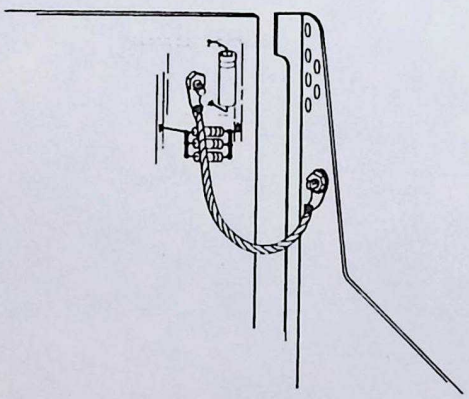
There are several grounding straps to be added between various members of the chassis and some of the PC boards.

There are two sizes of braided wire provided in your kit for making these connections, 1/8 inch and 1/4 inch. The 1/4 inch size is used along the edge of the power supply board and the 1/8 inch is used to make all other connections.

The first connection is to be made between the display/control board and the chassis.

( ) Cut a length of the 1/8 inch braid approximately 3 inches and solder a solder lug in place on each end.

( ) Referring to the drawing below, attach the braid between the 7805 mounting screw on the back side of the display/control board and the chassis as shown.

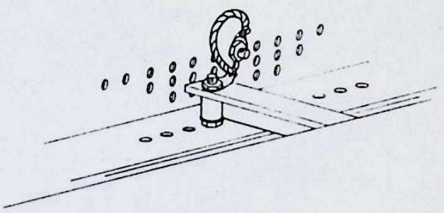


NOTE: At any point where a connection is made to the chassis, first rub the area around the connection point with sandpaper or some other abrasive to remove the anodizing.

This connection should be insulated using heat-shrink or some other such tubing.

( ) Prepare another length of 1/8 inch braid in exactly the same manner as the first piece.

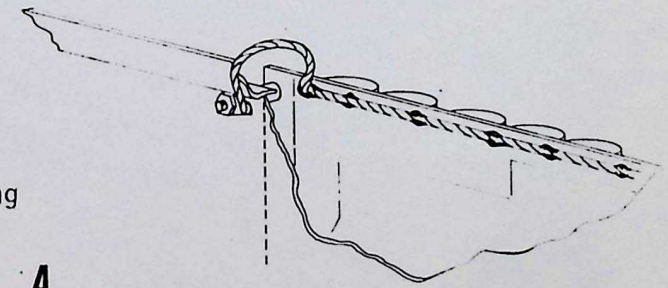
( ) Connect this braid between the card rail towards the back of the unit on the side opposite the transformers and the chassis as shown in the drawing below.



( ) The 1/4 inch braid is to be soldered directly to the PC land on the bottom (non silk-screened) side of the power supply board. Solder this braid in place along its entire length between the negative side of C1 and the positive side of C14. (see drawing below)

( ) Prepare a 4 inch length of 1/8 inch braid by attaching a solder lug to one end.

( ) Solder the end opposite the lug on the 4 inch length to the end of the 1/4 inch braid beneath capacitor C1 as shown in the drawing below. The end of the 1/8 inch braid with the solder lug will be attached to the bottom side of the cross member with the same screw which mounts the closest corner of the power supply board.



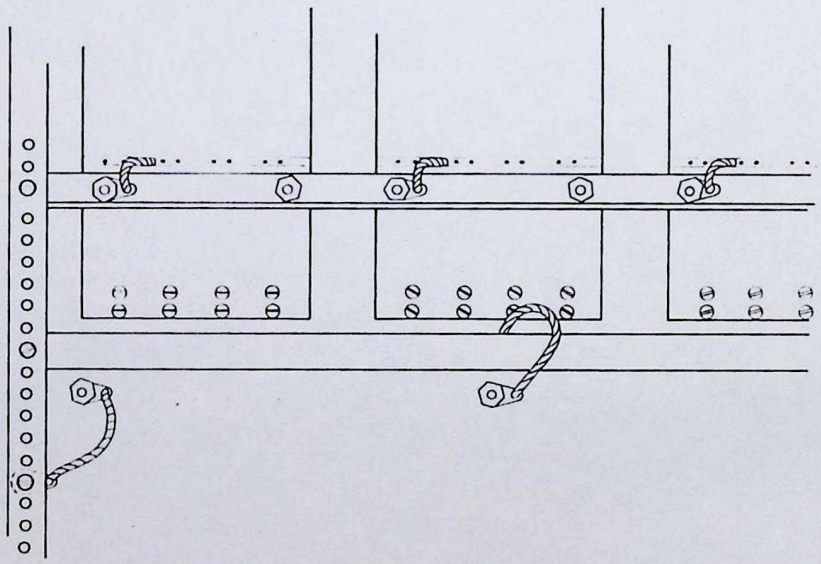
( ) Prepare another 3 inch length of 1/8 inch braid by attaching solder lugs to each end.

( ) Connect this length of braid between the cross member on the side opposite the transformers and the chassis as shown in the drawing below.

NOTE: The drawing below also shows the 4 inch length of braid from the power supply board properly attached to the cross member as previously instructed.

( ) Prepare a 3 inch length of 1/8 inch braid for each of the expander boards in your kit by attaching a solder lug to one end.

( ) Connect these wires between the card rail and the expander boards as shown in the drawing below. The end of the braid opposite the lug should be soldered directly to the land on the expander board which runs along the edge connecting pins 50 and 100 of each connector. Be very careful not to create any solder bridges when making this connection.



FAN INSTALLATION

There is a 110 VAC cooling fan which is to be mounted on the 8800 Back Panel.

( ) Cut two 3 inch lengths of wire and strip 1/4 inch of insulation from both ends of each wire. Tin the ends by applying a thin coat of solder.

( ) Attach a terminal lug to one end of each of the wires and solder it in place.

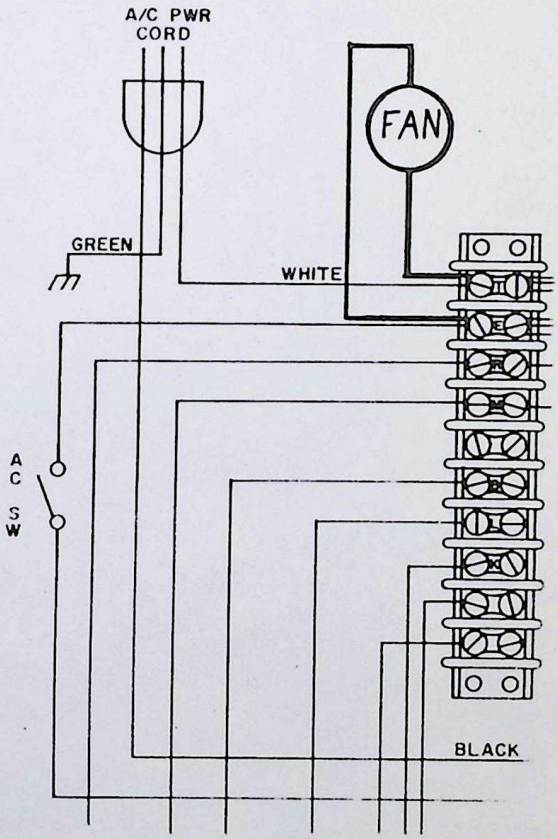
( ) Orient the fan so that the arrow with the word "AIRFLOW" is facing upwards. There are two terminals to one side of the arrow. Attach the end of one of the wires opposite the terminal lug to one of the terminals on the fan and solder it in place. Attach the other wire to the other terminal in the same manner.

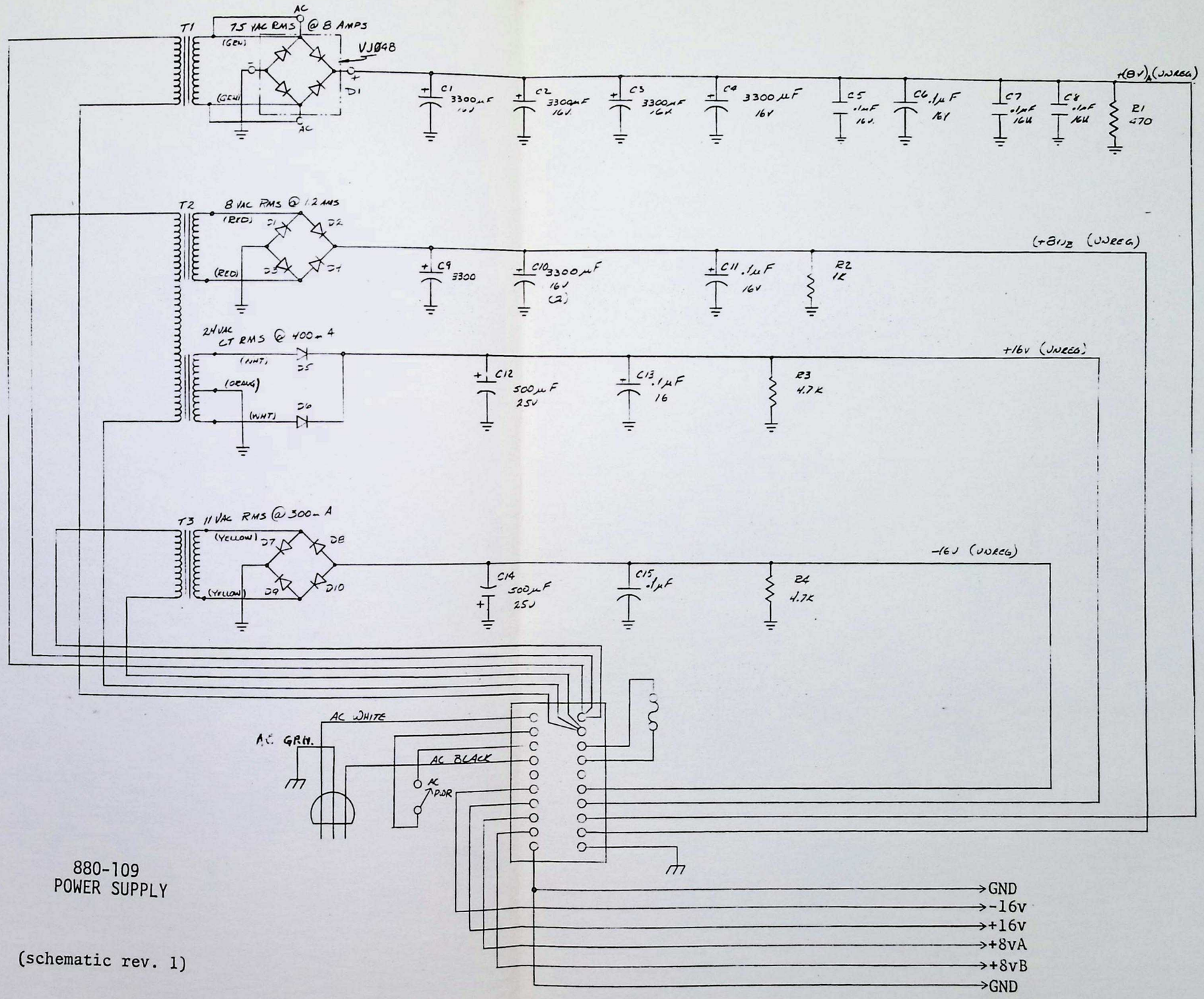
( ) There are four clip nuts included with the fan hardware. These should be pressed into place over the four screw holes in the corners of the fan on the side towards which the arrow is pointing. Place them on the inside portion of the fan body which is generally shaped the same as the clip nut itself.

( ) Before mounting the fan, insulate the two terminals where the wires connect to the fan with plastic tape or tubing.

( ) Mount the fan to the 8800 back panel using the four screws supplied with the hardware. Orient the fan with the arrow on top pointing towards the back panel. Insert the screws from the outside of the panel and tighten them into place.

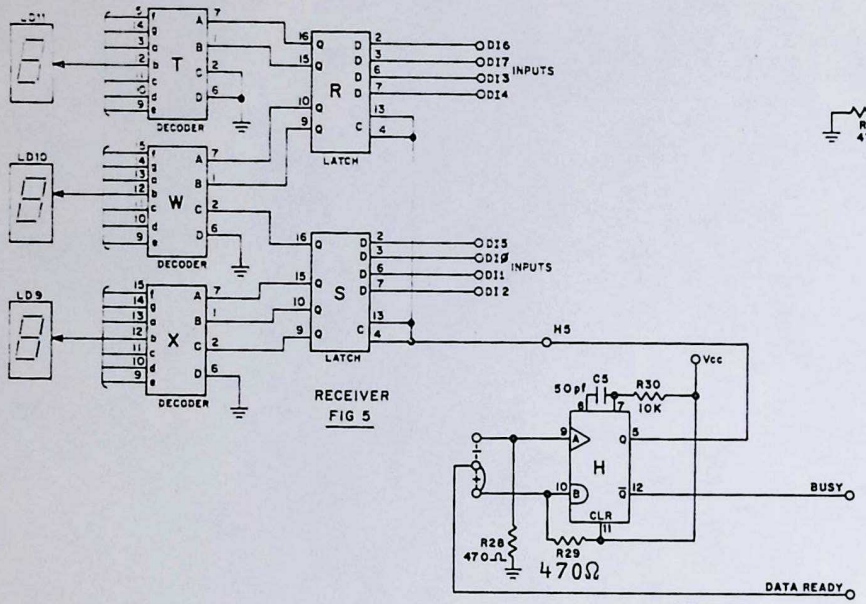
( ) The two terminal lugs on the three inch wires should now be connected to the terminal block. The terminals should be connected to the two top connectors on the left side of the block as shown in the circuit diagram below. Be careful not to short any of the lugs together when making these connections.

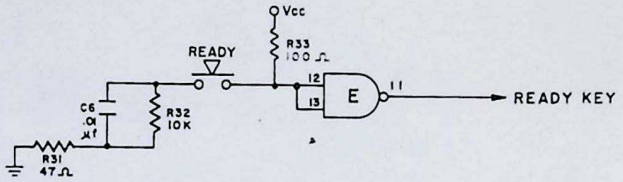




880-109
POWER SUPPLY

(schematic rev. 1)





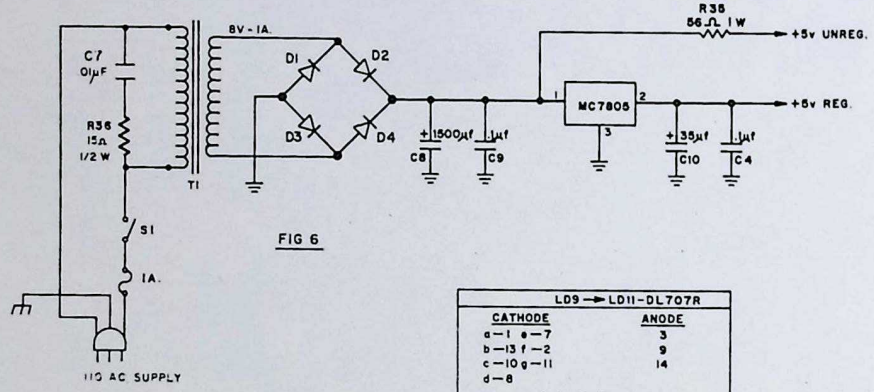


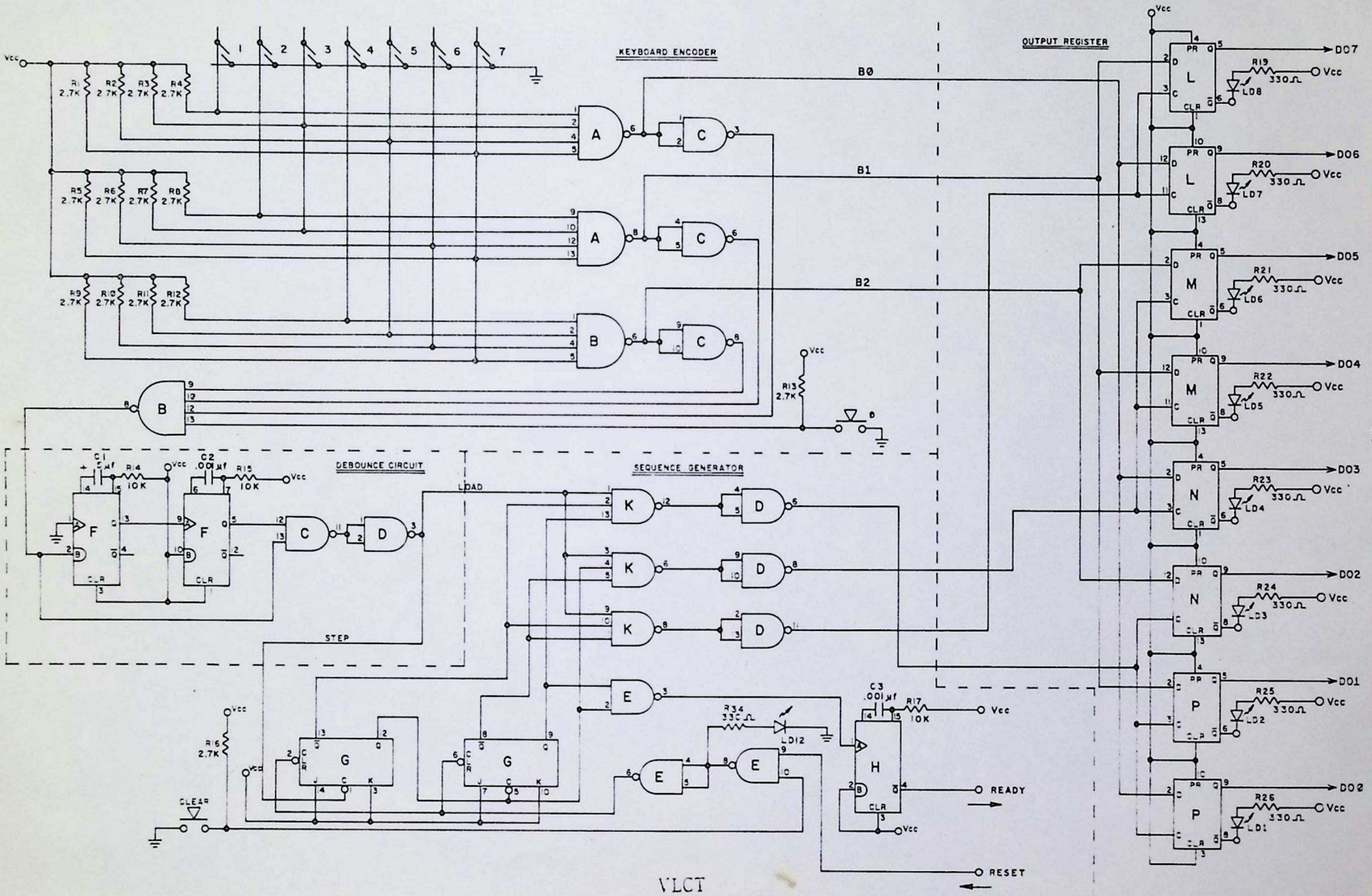
FIG 6

LD9 → LD11-DL707R	
CATHODE	ANODE
a—1 e—7	3
b—13 f—2	9
c—10 g—11	14
d—8	
4-5-6-12→N/C	

POWER CONNECTION			
IC	TYPE	Vcc	GND
A	7420	14	7
B	7420	14	7
L	7474	1,4,10,13,14	7
M	7474	1,4,10,13,14	7
N	7474	1,4,10,13,14	7
P	7474	1,4,10,13,14	7
K	7410	14	7
C	7400	14	7
D	7400	14	7
E	7400	14	7
F	74123	16	8
G	7473	14,3,4,7,10	11
R	7475	5	12
S	7475	5	12
T	7447	3,5,16	8
W	7447	3,5,16	8
X	7447	3,5,16	8
J			
H	74123	16	8

VLCT

SCHEMATICS



VLCT

SCHEMATICS